



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|----------------------|------------------|
| 09/976,206 | 10/12/2001 | Bidyut Parruck | AZA-003-7D/2001-P010 | 2342 |

293 7590 11/16/2006

Ralph A. Dowell of DOWELL & DOWELL P.C.
2111 Eisenhower Ave
Suite 406
Alexandria, VA 22314

| |
|----------|
| EXAMINER |
|----------|

DUONG, DUC T

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2616

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,206

Applicant(s)

PARRUCK ET AL.

Examiner

Duc T. Duong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-49, 51-55 and 57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45-49 and 53-55 is/are rejected.
- 7) ☒ Claim(s) 51, 52 and 57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The indicated allowability of claims 45-49, 51-55, and 57 are withdrawn in view of the newly discovered reference(s) to Chiusssi et al (US Patent 5,689,500). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 45, 46, 48, 49, and 53-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiusssi et al (US Patent 5,689,500).

Regarding to claims 45, 53, and 54, Chiussi discloses a method involving a first line card 110, a second line card 150, and a switch fabric 130, the first line card 110 comprising an ingress device 201 and an egress device 206, the second line card 150 comprising an ingress device 203 and an egress device 208, a flow of network information flowing out of the ingress device 201 of the first line card 110 and through the switch fabric 130 and to the egress device 208 of the second line card 150, the egress device 208 of the second line card 150 having an amount of payload memory (buffer RAM) available for storing network information, wherein the egress device 208 of the second line card 150 comprises a first integrated circuit 208, the ingress device 203 of the second line card 150 comprises a second integrated circuit 203, the egress

Art Unit: 2616

device 206 of the first line card 110 comprises a third integrated circuit 206, and the ingress device 201 of the first line card 150 comprises a fourth integrated circuit 201, wherein the first, second, third and fourth integrated circuits are substantially structurally identical integrated circuits (fig. 1-3 col. 2 lines 32-67 and col. 3 lines 1-59), the method comprising detecting on the egress device 208 of the second line card 150 that the amount of available payload memory (buffer RAM) has reached a low level (col. 13 lines 49-67); in response to the detecting of (a) sending a first indication (backpressure status) from the egress device 208 of the second line card 150 to the ingress device 203 of the second line card 150, the first indication being sent from the egress device 208 of the second line card 150 to the ingress device 203 of the second line card via a bus (arrow) on the second line card 150 (fig. 2 and 11 col. 15 lines 8-12); receiving the first indication on the ingress device 203 of the second line card 150 and in response sending a status switch cell from the ingress device 203 of the second line card 150, through the switch fabric 130, and to the egress device 206 of the first line card 110 (fig. 2 and 11 col. 15 lines 17-22); receiving the status switch cell on the egress device 206 of the first line card 110 and in response sending a second indication from the egress device 206 of the first line card 110 to the ingress device 201 of the first line card 110, the second indication being sent for the egress device 206 of the first line card 110 to the ingress device 201 of the first line card 110 via a bus on the first line card 110 (fig. 2 and 11 col. 14 lines 36-44); and receiving the second indication on the ingress device 201 of the first line card 110 and in response slowing the flow of the network information out of the ingress device of the first line card 110 (fig. 2 and 11 col. 14 lines 45-51).

Regarding to claim 46, Chiussi discloses the payload memory is coupled to the egress device of the second line card (fig. 2 col. 2 lines 63-67 and col. 3 lines 1-3).

Regarding to claim 48, Chiussi discloses the flow of the network information is slow by stopping the flow of the network information out of the ingress device of the first line card (col. 15 lines 25-28).

Regarding to claims 49 and 55, Chiussi discloses the egress device of the second line card maintains a free buffer queue, the free buffer queue having a size, the egress device of the second line card detecting that the amount of available payload memory has reached a low level in (a) by monitoring the size of the free buffer queue (col. 13 lines 50-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi.

Regarding to claim 47, Chiussi discloses all the limitation with respect to claim 45, except for the bus on the second line card is a serial bus, and wherein the bus on the first line card is a serial bus. However, to arrange for such bus to be a serial bus would have been obvious to a person of ordinary skill in the art since such arrangement is well known and can be easily implement via hardware.

Allowable Subject Matter

6. Claims 51, 52, and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD
DD



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800